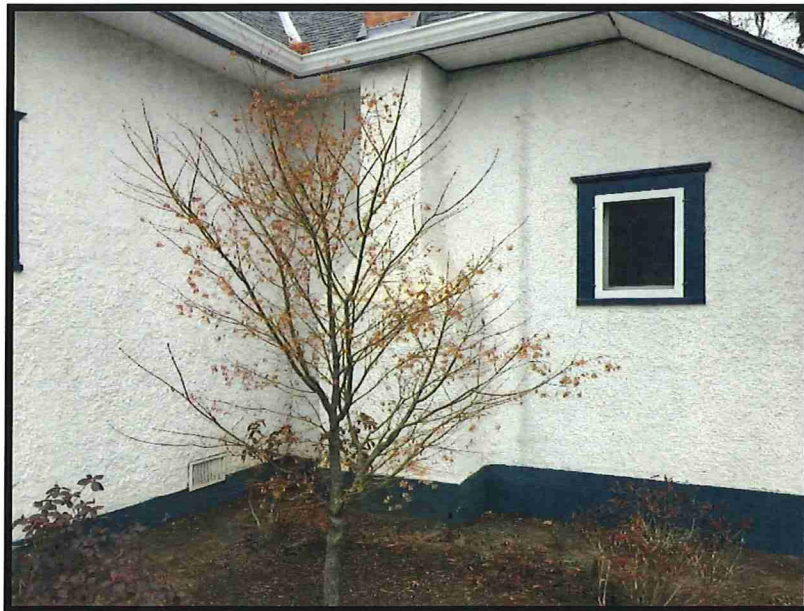


Apex EHS Services Inc.
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Pre-Renovation Hazardous Material Survey Report

John Bachelder Construction
409 Park Avenue, Kelowna, BC



December 14, 2018

Apex File Number: JBC18-009

EXECUTIVE SUMMARY

Apex EHS Services (Apex) were retained by John Bachelder Construction to undertake a Pre-Renovation Hazardous Materials survey at the residential building located at 409 Park Ave, Kelowna, BC. This survey was conducted for due diligence and regulatory compliance purposes as required by Section 20.112 of the BC Occupational Health and Safety (WorkSafeBC) Regulation.

As per BC Assessment, we understand the building was constructed in 1920 a period where hazardous materials were incorporated into building finishes and structures.

WorkSafeBC defines Hazardous Materials as:

- asbestos-containing material,
- lead or any other heavy metal, or
- toxic, flammable or explosive material

Other hazardous materials included in this assessment comprised ozone depleting substances (ODS), crystalline silica, mould growth and radioactive materials.

The survey was limited to the renovation area as indicated by John Bachelder Construction. The renovation area included the following:

- Interior finishes throughout the residence; and
- Exterior wall finishes.

FINDINGS

Hazardous Material	Type / Location
Asbestos-containing Building Materials (ACMs)	Duct wrap applied to floor registers throughout the top floor. Duct tape applied to duct seams throughout the residence. Vermiculite insulation present within the wall cavity of the east wall of the living room (Loc. 8). Drywall joint compound applied to drywall walls and ceiling within the landing, bedroom #3, storage, bathroom, bedroom #4 (loc. 9-13). Plaster applied to walls and ceilings throughout the residence. Drywall joint compound applied to drywall walls and ceilings within the laundry room (loc. 4) and bedroom #1 (loc. 5).

Hazardous Material	Type / Location
Lead in Paints	<p>The following paints had a lead content of greater than 0.009%:</p> <ul style="list-style-type: none"> • White paint applied to drywall within the foyer, kitchen, storage, landing, storage, bathroom, and bedroom #4 (loc. 1, loc. 3, loc. 6, loc. 9, loc. 11-13); • White paint applied to plaster foyer, landing, and bedroom #4 (loc. 1, loc. 9, and loc. 13); • Brown paint applied to plaster within the dining room (loc. 2); • Blue paint applied to plaster within the living room (loc. 8); • White paint applied to wood trim throughout the residence.
Lead Products	Lead products were not identified within the renovation area.
Mercury	Mercury was not identified within the renovation area.
Polychlorinated Biphenyls (PCBs)	PCBs were not identified within the renovation area.
Crystalline Silica	Plaster, ceramics, bricks, mortar, and stucco throughout the building are assumed to contain crystalline silica.
Ozone Depleting Substances	Ozone depleting substances were not observed within the renovation area.
Radioactive Materials	Smoke detectors throughout the residence are assumed to contain low levels of radioactive materials.
Mould	No significant areas of suspect visible mould were identified within the renovation area.
Flammable and Explosive Materials	Flammable and explosive materials were not identified within the renovation area.

RECOMMENDATIONS

- All asbestos-containing material must be removed using safe work procedures and practices prior to renovation activities.
- An asbestos risk assessment must be performed by a qualified professional prior to renovation work occurring to determine the exposure risk to workers and other persons.
- Proper procedures and documentation such as safe work practices, an exposure control plan, risk assessments and/or other controls must be developed if paints containing greater than 0.009% lead are to be removed or disturbed.
- Non-recyclable materials coated with paints containing greater than 0.01% lead should be submitted for lead leachate analysis to determine method of disposal subject to the requirements of the landfill selected for disposal.
- Smoke detectors should be removed and recycled prior if impacted by renovation activities.
- Safe work procedures should be followed when disturbing materials that contain silica.
- If a suspect hazardous material not identified in this report is discovered during the course of renovation work this material must not be disturbed until a qualified person has collected a sample (if required) and determined whether the material is hazardous.
- A copy of this report must be posted on site
- A written report must be prepared confirming the removal or safe containment of all hazardous materials identified in this report prior to commencement of renovation work.

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1.0 INTRODUCTION

Apex EHS Services (Apex) were retained by John Bachelder Construction to undertake a Pre-Renovation Hazardous Materials survey at the residential building located at 409 Park Ave, Kelowna, BC. This survey was conducted for due diligence and regulatory compliance purposes as required by Section 20.112 of the BC Occupational Health and Safety (WorkSafeBC) Regulation.

As per BC Assessment, we understand the building was constructed in 1920 a period where hazardous materials were incorporated into building finishes and structures.

WorkSafeBC defines Hazardous Materials as:

- asbestos-containing material,
- lead or any other heavy metal, or
- toxic, flammable or explosive material

Other hazardous materials included in this assessment comprised ozone depleting substances (ODS), crystalline silica, mould growth and radioactive materials.

The survey was limited to the renovation area as indicated by John Bachelder Construction. The renovation area included the following:

- Interior finishes throughout the residence; and
- Exterior wall finishes.

The HMS was conducted by Shea Bennett of Apex on December 7, 2018. The objective of the HMS was to identify specified hazardous building materials in preparation for renovation activities, which were determined by systematic visual assessment, selective sampling and laboratory analysis. Specific methodology employed during the HMS is included in Appendix 1. The regulatory framework pertaining to hazardous materials is included in Appendix 2. The terms of reference for this report are included in Appendix 6.

2.0 LIMITATIONS

This HMS was limited to construction materials and components. The analytical results of visually homogenous materials were extrapolated throughout the structure dependant on visual indications or other available information on estimated phases of construction. Some materials such as painted drywall surfaces and plaster finishes cannot be extrapolated with certainty. No below-grade water drainage or plumbing systems or sub-surface investigation of materials was included in the scope of this HMS.

Limited destructive testing was completed to the extent practicable. It's not possible to comprehensively evaluate all hidden spaces such as behind wall surfaces, within pipe chases and chimneys during a survey with removing all finishes that cover such areas. As such, if during the course of renovation work hidden

suspect asbestos materials are identified these should not be disturbed until further evaluation can be made.

Materials assumed not to contain asbestos during this HMS included wood and wood composite materials, carpet, synthetic plastics, metals and concrete.

3.0 FINDINGS

Sample location drawings are included in Appendix 3. Photographs of hazardous materials are included in Appendix 4.

Hazardous material sample results and visually identified hazardous materials are shown in tables 1 to 3. Laboratory analytical results are included in Appendix 5.

Table 1 - Asbestos					
Sample #	Material	Description	Location	Asbestos Content / Type	Approximate Quantity (Square Feet)*
S01	Duct Wrap	Applied to Floor Registers	Throughout the Main Floor	60-70 % / Chrysotile	Applied to 10 Registers
S02	Duct Tape	Applied to Duct Seams	Throughout the Residence	60-70 % / Chrysotile	Applied to 30 Seams
S03	Vinyl Sheet Flooring	Blue	Bedroom #3 (Loc. 10)	Not Detected	-
S04(a-c)	Vermiculite Insulation	Wall Cavity (See Site Plan)	Living Room (Loc. 8)	Actinolite Detected	10
S05(a-c)	Drywall Joint Compound	Applied to Drywall Walls and Ceilings	Landing, Bedroom #3, Storage, Bathroom, Bedroom #4 (Loc. 9-13).	0.5-5% / Chrysotile	1,250
S06(a-c)	Drywall Joint Compound	Applied to Drywall Walls and Ceilings	Bedroom #5 (Loc. 14)	Not Detected	-
S07(a-c)	Texture Coat	Applied to Drywall Ceiling	Landing (Loc. 9)	Not Detected	-
S08(a-c)	Texture Coat	Applied to Plaster Ceiling	Landing (Loc. 9)	Not Detected	-
S09(a-c)	Texture Coat	Applied to Drywall Ceiling	Bedroom #3 (Loc. 10)	Not Detected	-
S10(a-c)	Texture Coat	Applied to Plaster Ceiling	Bedroom #3 (Loc. 3)	Not Detected	-

Table 1 - Asbestos

Sample #	Material	Description	Location	Asbestos Content / Type	Approximate Quantity (Square Feet)*
S11(a-c)	Texture Coat	Applied to Drywall Ceiling	Bedroom #5 (Loc. 14)	Not Detected	-
S12(a-c)	Plaster	Applied to Walls and Ceiling	Throughout Top Floor	0.5-5% / Chrysotile	900
S13(a-c)	Plaster	Applied to Walls and Ceiling	Throughout Main Floor	0.5-5% / Chrysotile	900
S14(a-c)	Drywall Joint Compound	Applied to Drywall Walls and Ceilings	Foyer, Storage #1, and Bedroom #2 (Loc. 1, 6, and 7)	Not Detected	-
S15(a-c)	Drywall Joint Compound	Applied to Drywall Walls and Ceilings	Laundry Room and Bedroom #1 (Loc. 4 & 5)	0.5-5% / Chrysotile	400
S16(a-c)	Texture Coat	Applied to Plaster Ceiling	Foyer, Dining Room, Kitchen, Living Room (Loc. 1-3, & 8)	Not Detected	-
S17(a-c)	Texture Coat	Applied to Drywall Ceiling	Storage 1 (Loc. 6)	Not Detected	-
S18(a-c)	Texture Coat	Applied to Drywall Walls	Storage 1 (Loc. 6)	Not Detected	-
S19(a-c)	Texture Coat	Applied to Drywall Ceiling	Bedroom #2 (Loc. 7)	Not Detected	-
S20(a-c)	Mortar	Applied to Bricks	Exterior	Not Detected	-
S21(a-c)	Stucco	Applied as Building Cladding	Exterior	Not Detected	-

Asbestos-containing materials are bolded.

*Quantities are an estimate and should not be used as an exact measurement.

According to WorkSafeBC, the definition of an asbestos-containing material is 0.5% by weight, with the exception of vermiculite, which is considered asbestos-containing if any amount of asbestos is present.

Attic insulation was observed to be cellulose therefore may be treated as a non-asbestos-containing material.

Table 2 - Lead Paint ¹				
Sample #	Substrate / Colour	Location	Lead Content (%)	Approximate Quantity (Square Feet)*
L01	Drywall / White	Foyer (Loc. 1), Kitchen (Loc. 3), Storage 1 (Loc. 6), Landing (Loc. 9), Storage 2 (Loc. 11), Bathroom (Loc. 12), Bedroom 4 (Loc. 13)	0.05	1,300
L02	Plaster / White	Foyer (Loc. 1), Landing (Loc. 9), Bedroom 4 (Loc. 13)	0.08	800
L03	Drywall / Pale Blue	Bedroom 5 (Loc. 14)	<0.009	-
L04	Plaster / Brown	Dining Room (Loc. 2)	0.01	450
L05	Plaster / Blue	Living Room (Loc. 8)	0.08	400
L06	Drywall / Green	Bedroom 2 (Loc. 7)	<0.009	-
L07	Drywall / Grey	Bedroom 1 (Loc. 5), Storage 1 (Loc. 6)	<0.009	-
L08	Wood / White	Throughout the Building	0.12	700

Paints with a lead content greater than 0.009% lead are identified as lead containing and are bolded

*Quantities are an estimate and should not be used as an exact measurement.

¹ Paints with a lead content greater than 0.009% w/w are identified as lead containing

Table 3 – Other Hazardous Materials	
Material	Locations
Lead Products	Lead products were not identified within the renovation area.
Mercury	Mercury was not identified within the renovation area.
Polychlorinated Biphenyls (PCBs)	PCBs were not identified within the renovation area.
Crystalline Silica	Plaster, ceramics, bricks, mortar, and stucco throughout the building are assumed to contain crystalline silica.
Ozone Depleting Substances	Ozone depleting substances were not observed within the renovation area.
Radioactive Materials	Smoke detectors throughout the residence are assumed to contain low levels of radioactive materials.
Mould	No significant areas of suspect visible mould were identified within the renovation area.
Flammable and Explosive Materials	Flammable and explosive materials were not identified within the renovation area.

4.0 RECOMMENDATIONS

- All asbestos-containing material must be removed using safe work procedures and practices prior to renovation activities.
- An asbestos risk assessment must be performed by a qualified professional prior to renovation work occurring to determine the exposure risk to workers and other persons.
- Proper procedures and documentation such as safe work practices, an exposure control plan, risk assessments and/or other controls must be developed if paints containing greater than 0.009% lead are to be removed or disturbed.
- Non-recyclable materials coated with paints containing greater than 0.01% lead should be submitted for lead leachate analysis to determine method of disposal subject to the requirements of the landfill selected for disposal.
- Smoke detectors should be removed and recycled prior if impacted by renovation activities.
- Safe work procedures should be followed when disturbing materials that contain silica.
- If a suspect hazardous material not identified in this report is discovered during the course of renovation work this material must not be disturbed until a qualified person has collected a sample (if required) and determined whether the material is hazardous.
- A copy of this report must be posted on site.
- A written report must be prepared confirming the removal or safe containment of all hazardous materials identified in this report prior to commencement of renovation work.

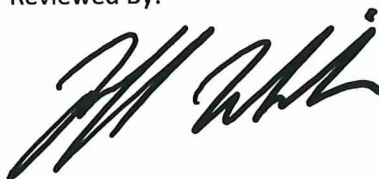
5.0 CLOSURE

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Appendix 1 – Methodology

ASBESTOS-CONTAINING MATERIALS (ACMs)

An initial walk-through inspection was conducted throughout the structure and observations were made of the wall, ceiling, floor, and other materials including any machinery or equipment to make a preliminary determination if asbestos could be present.

To confirm or discount the presence of asbestos, representative bulk samples were collected. The sample location in the building was identified with a unique sample number. The number of representative bulk samples collected was consistent with recognized industry standards and principles of good occupational hygiene practice. The approximate quantity, location and sample locations of suspect ACMs were recorded.

Surveys are conducted and samples are collected in accordance with the WorkSafeBC Guideline to Section 20.112 of the BC Occupational Health and Safety Regulation and outlined in Safe Work Practices for Asbestos. Flooring mastic/adhesive and leveling compounds are only sampled and analyzed if present on the underside of flooring samples (vinyl floor tile and vinyl sheet flooring).

Bulk samples were submitted for analysis in accordance with PLM: Bulk Asbestos Building Materials EPA 600 R 93 / 116. 1993. The asbestos analysis was completed using a stop positive approach. Stop positive means samples in a homogenous material sample set were analyzed consecutively and when a sample was identified as asbestos-containing, further sample analysis within that sample set was not completed.

A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogenous materials are determined by visual examination and available information on the phases of construction and prior renovations.

Samples containing >0.5% asbestos were identified as being asbestos containing. Vermiculite insulation was identified as being asbestos containing if any trace of asbestos was found.

LEAD PAINTED MATERIALS

During the walk-through inspection a visual review of the painted surfaces was conducted for paints and coatings. Apex personnel collected representative bulk samples from the building structure. The number of representative bulk samples collected was consistent with recognized industry standards and principles of good occupational hygiene practice.

Bulk samples were submitted for lead analyses in accordance with ASTM D3335-85A "Standard Method to Test for Low Concentrations of Lead in Paint by Atomic Absorption Spectrophotometry". Chain-of-custody protocol was observed during handling and transportation of the bulk samples.

Samples containing >0.009% (90 mg/kg) lead were identified as lead paints.

OTHER HAZARDOUS MATERIALS

Lead products, mercury-containing thermostats, mercury-containing fluorescent tube/lamps, potentially flammable materials and potentially explosive materials were confirmed or discounted by visual inspection only, no samples were collected.

If the building was constructed prior to 1980 all fluorescent light ballasts were assumed to potentially contain PCBs unless additional information was provided. All smoke detectors were assumed to contain small quantities of radioactive materials unless additional information was provided. If present, concrete, cement, tile, brick, masonry and mortar were assumed to contain crystalline silica.

The potential presence of ODS in refrigeration equipment and fire suppression systems was determined by visual inspection of manufactures labels and maintenance records only.

This survey included a visual inspection of surface materials for larger areas of suspect visible mould (>10 square feet) only. Samples were not collected to confirm the presence of mould growth nor was an intrusive inspection performed for mould growth.

Appendix 2 – Regulatory Framework

1. BC Occupational Health and Safety Regulation
2. Safe Work Practices for Handling Asbestos, WorkSafeBC, 2017
3. Hazardous Waste Regulation, BC Ministry of Environment
4. Ozone Depleting Substances and other Halocarbons Regulation, B.C. Reg. 220 / 2006, Environmental Management Act.
5. PCB Regulations, SOR / 2008-273, Canadian Environmental Protection Act.
6. Safe Work Practices for Handling Lead, WorkSafeBC, 2017
7. Transportation of Dangerous Goods Regulations SOR / 2008-34, Transportation of Dangerous Goods Act.

Appendix 3 – Drawing



Top Floor



- Locations:
- 10. Bedroom 3
 - 11. Storage
 - 12. Bathroom
 - 13. Bedroom 4
 - 14. Bedroom 5

<p>LEGEND</p> <ul style="list-style-type: none"> ● Asbestos Sample Location -Positive Result ▲ Lead Sample Location -Result Above 0.009 	<p>PROJECT NAME: Pre-Renovation Hazardous Materials Survey</p>	<p>DATE: December 13, 2018</p>
	<p>PROJECT ADDRESS: 409 Park Avenue, Kelowna, BC</p>	<p>PROJECT NO.: JBC18-009</p>
	<p>CLIENT: John Bachelдор Construction</p>	<p>SCALE: NTS</p>
		<p>DRAWN BY: N. Boule-Paquette</p>

Appendix 4 – Photographs



Duct wrap applied to floor registers throughout the top floor was found to contain **asbestos**.



Vermiculite insulation present within the wall cavity of the east wall of the living room (Loc. 8) contains **asbestos**.



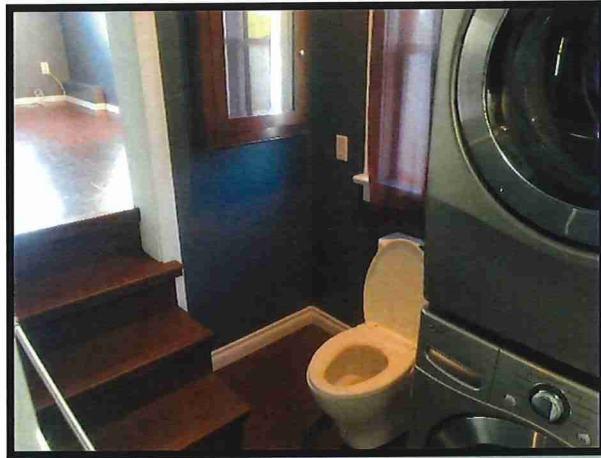
Drywall joint compound applied to drywall walls and ceiling within the landing, bedroom #3, storage, bathroom, bedroom #4 (loc. 9-13) contains **asbestos**.

White paint applied to drywall within the foyer, kitchen, storage, landing, storage, bathroom, and bedroom #4 (loc. 1, loc. 3, loc. 6, loc. 9, loc. 11-13) has a lead content >0.009%.

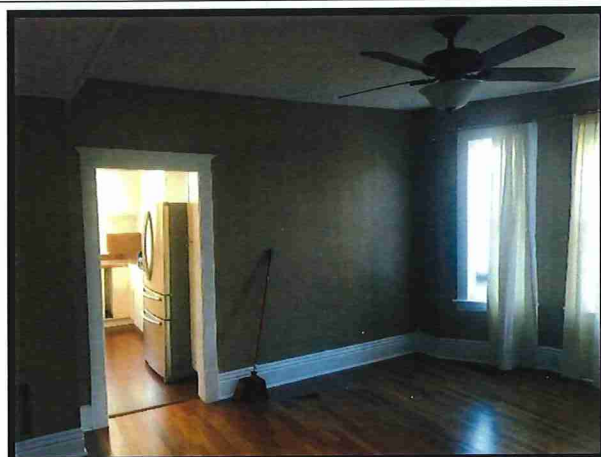
White paint applied to plaster foyer, landing, and bedroom #4 (loc. 1, loc. 9, and loc. 13) has a lead content >0.009%.



Plaster applied to walls and ceilings throughout the residence contains **asbestos**.
Blue paint applied to plaster within the living room (loc. 8) has a lead content >0.009%.
Plaster, ceramics, bricks, mortar, and stucco throughout the building are assumed to contain crystalline silica.



Drywall joint compound applied to drywall walls and ceilings within the laundry room (loc. 4) and bedroom #1 (loc. 5) contains **asbestos**.



Brown paint applied to plaster within the dining room (loc. 2) has a lead content >0.009%.
White paint applied to wood trim throughout the residence has a lead content >0.009%.

Appendix 5 – Analytical Results



ASBESTOS ANALYSIS REPORT

Client:	John Bachelder Construction	Report Number:	JBC18-009
Project Location:	409 Park Ave, Kelowna, BC	Project Number:	-
Number of Samples:	48	Project:	-
Reported:	12/12/2018		

Sample No.	Lab No.	Phase	Sample Description	Results
S01	34125	Single - Beige Fibrous	Duct Wrap / Location 1	60-70% Chrysotile Asbestos 30-40% Non-Fibrous
S02	34126	Single - Beige & Brown Fibrous	Duct Tape / Location 10	60-70% Chrysotile Asbestos 30-40% Non-Fibrous
S03	34127	1st Layer - Blue Vinyl	Vinyl Sheet Flooring (Blue) / Location 10	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S03	34127	2nd Layer - Black Fibrous	Vinyl Sheet Flooring (Blue) / Location 10	Asbestos Fibres Not Detected 60-70% Cellulose 30-40% Non-Fibrous
S03	34127	3rd Layer - Brown Compound	Vinyl Sheet Flooring (Blue) / Location 10	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S04a	34128	Single - Brown Granular, White Fibrous	Vermiculite / Attic	Actinolite Asbestos Detected
S04b	34129	-	Vermiculite / Attic	Sample Not Analyzed
S04c	34130	-	Vermiculite / Attic	Sample Not Analyzed
S05a	34131	1st Layer - White Compound	Drywall Joint Compound / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S05a	34131	2nd Layer - Beige Compound, Fibrous	Drywall Joint Compound / Location 9	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous
S05b	34132	-	Drywall Joint Compound / Location 11	Sample Not Analyzed
S05c	34133	-	Drywall Joint Compound / Location 10	Sample Not Analyzed

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

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Sample No.	Lab No.	Phase	Sample Description	Results
S06a	34134	Single - White Compound	Drywall Joint Compound / Location 14	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S06b	34135	Single - White Compound	Drywall Joint Compound / Location 14	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S06c	34136	Single - White Compound	Drywall Joint Compound / Location 14	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S07a	34137	Single - White Compound	Texture Coat (Long Drywall In Stairwell) / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S07b	34138	Single - White Compound	Texture Coat (Long Drywall In Stairwell) / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S07c	34139	Single - White Compound	Texture Coat (Long Drywall In Stairwell) / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S08a	34140	Single - White Compound	Texture Coat (On Plaster) / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S08b	34141	Single - White Compound	Texture Coat (On Plaster) / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S08c	34142	Single - White Compound	Texture Coat (On Plaster) / Location 9	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S09a	34143	Single - White Compound	Texture Coat / Location 10	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S09b	34144	Single - White Compound	Texture Coat / Location 10	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S09c	34145	Single - White Compound	Texture Coat / Location 10	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S10a	34146	Single - White Compound	Texture Coat / Location 13	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S10b	34147	Single - White Compound	Texture Coat / Location 13	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S10c	34148	Single - White Compound	Texture Coat / Location 13	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S11a	34149	Single - White Compound,Fibrous	Texture Coat / Location 14	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Apex EHS Services Inc.

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Sample No.	Lab No.	Phase	Sample Description	Results
S11b	34150	Single - White Compound,Fibrous	Texture Coat / Location 14	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S11c	34151	Single - White Compound,Fibrous	Texture Coat / Location 14	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S12a	34152	1st Layer - Beige Compound	Plaster / Location 13	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S12a	34152	2nd Layer - Grey Compound, Fibrous	Plaster / Location 13	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous
S12a	34152	3rd Layer - Grey Compound, Granular, Fibrous	Plaster / Location 13	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous
S12b	34153	-	Plaster / Location 10	Sample Not Analyzed
S12c	34154	-	Plaster / Location 13	Sample Not Analyzed
S13a	34155	1st Layer - White Compound	Plaster / Location 8	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S13a		2nd Layer - Grey Compound, Granular	Plaster / Location 8	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S13a		3rd Layer - Beige Fibrous	Plaster / Location 8	Asbestos Fibres Not Detected 60-70% Cellulose 30-40% Non-Fibrous
S13b	34156	1st Layer - White Compound	Plaster / Location 1	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S13b		2nd Layer - Grey Compound, Granular	Plaster / Location 1	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous
S13b		3rd Layer - Beige Fibrous	Plaster / Location 1	Asbestos Fibres Not Detected 60-70% Cellulose 30-40% Non-Fibrous
S13c	34157	-	Plaster / Location 2	Sample Not Analyzed
S14a	34158	Single - White Compound	Drywall Joint Compound / Location 7	Asbestos Fibres Not Detected 90-100% Non-Fibrous

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Analyst: H.Fiebelkorn

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Sample No.	Lab No.	Phase	Sample Description	Results
S14b	34159	Single - White Compound	Drywall Joint Compound / Location 6	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S14c	34160	1st Layer - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S14c	34160	2nd Layer - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S15a	34161	Single - Grey Compound	Drywall Joint Compound / Location 4	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous 
S15b	34162	-	Drywall Joint Compound / Location 5	Sample Not Analyzed
S15c	34163	-	Drywall Joint Compound / Location 5	Sample Not Analyzed
S16a	34164	Single - Tan Compound	Texture Coat / Location 2	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S16b	34165	Single - Tan Compound	Texture Coat / Location 3	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S16c	34166	Single - Tan Compound	Texture Coat / Location 8	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S17a	34167	Single - White Compound, Fibrous	Texture Coat (Ceiling) / Location 6	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous 
S17b	34168	Single - White Compound, Fibrous	Texture Coat (Ceiling) / Location 6	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous 
S17c	34169	Single - White Compound, Fibrous	Texture Coat (Ceiling) / Location 6	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S18a	34170	Single - White Compound, Fibrous	Texture Coat (On Wall) / Location 6	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S18b	34171	Single - White Compound, Fibrous	Texture Coat (On Wall) / Location 6	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Analyst: H.Fiebelkorn

Apex EHS Services Inc.

1519 Keehn Road, Kelowna, BC, V1X 5T5

Phone:250-868-0667 Email:apex@apexehs.ca



Sample No.	Lab No.	Phase	Sample Description	Results
S18c	34172	Single - White Compound, Fibrous	Texture Coat (On Wall) / Location 6	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S19a	34173	Single - White Compound, Fibrous	Texture Coat / Location 7	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S19b	34174	Single - White Compound, Fibrous	Texture Coat / Location 7	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S19c	34175	Single - White Compound, Fibrous	Texture Coat / Location 7	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S20a	34176	Single - Grey Granular, Fibrous	Mortar / Exterior	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S20b	34177	Single - Grey Granular, Fibrous	Mortar / Exterior	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S20c	34178	Single - Grey Granular, Fibrous	Mortar / Exterior	Asbestos Fibres Not Detected 0.5-5% Cellulose 95-99.5% Non-Fibrous
S21a	34179	Single - Grey Granular	Stucco / Exterior	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S21b	34180	1st Layer - Grey Compound, Granular	Stucco / Exterior	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S21b	34180	2nd Layer - White Compound, Granular	Stucco / Exterior	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S21c	34181	1st Layer - Grey Compound, Granular	Stucco / Exterior	Asbestos Fibres Not Detected 90-100% Non-Fibrous
S21c	34181	2nd Layer - White Compound, Granular	Stucco / Exterior	Asbestos Fibres Not Detected 90-100% Non-Fibrous

Samples analyzed in accordance with US EPA 600/R-93/116 by Polarized Light Microscopy
 American Industrial Hygiene Association (AIHA) BAPAT Program Laboratory Number 224210
 Quantification of <0.25% by volume is possible with this method.
 Apex EHS Services will not accept any responsibility as to the manner of interpretation or application of these results.

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

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Authorized By:

A handwritten signature in black ink, appearing to read "Kelly Konrad".

Kelly Konrad, B.Sc., EP (OH&S)
Laboratory Manager

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Analyst: H.Fiebelkorn



LEAD ANALYSIS REPORT

Client: John Bachelder Construction **Report Number:** JBC18-009
Project Location: 409 Park Avenue, Kelowna, BC **Project Number:** -
Number of Samples: 8 **Project Name:** -
Reported: 10/12/2018

Sample No.	Lab No.	Description/Location	Weight	Lead Concentration
L01	108	White on Drywall/ Location 12	0.2454 g	0.05 % wt
L02	109	White on Plaster/ Location 13	0.2448 g	0.08 % wt
L03	110	Pale Blue on Drywall/ Location 14	0.2444 g	<0.009 % wt
L04	111	Brown on Plaster/ Location 2	0.2433 g	0.01 % wt
L05	112	Blue on Plaster/ Location 8	0.2458 g	0.08 % wt
L06	113	Green on Drywall/ Location 7	0.2444 g	<0.009 % wt
L07	114	Grey on Drywall/ Location 5	0.2453 g	<0.009 % wt
L08	115	White on Wood/ Location 2	0.2455 g	0.12 % wt

Samples analyzed in accordance with EPA Method 200.7/7000B and Apex EHS Services SOP of Lead Paint Analysis by FAAS. Reporting limit is 0.009 % wt based on the minimum required sample weight per Apex SOP. Apex EHS Services will not accept any responsibility as to the manner of interpretation of these results.

Authorized By:

Amanda Copp, B.Sc.
Laboratory Manager

Appendix 6 – Terms of Reference

- This report has been prepared in accordance with generally-accepted consulting practices and the level of care for hazardous materials and occupational health and safety consulting services. No other warranty, expressed or implied, is made.
- This report should be read in conjunction with all other communication between Apex EHS Services and the client with respect to the subject site.
- This report has been prepared in response to the specific objectives of the client as stated when Apex EHS Services was retained to carry out this project.
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- Apex EHS Services accepts no responsibility for any damages to a third party resulting from the use of this report.
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- Apex EHS Services has relied on any information provided by the client regarding the subject site and has assumed this information is accurate and truthful.
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